WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Thursday, July 15, 2004

Hide?	Set Name	Query	Hit Count
	DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
☐	L8	(activ$4 with inactiv$4 with (perform$4 near3 write near2 operation))	40
☐	L7	(activ$4 same inactiv$4 same (perform$4 near3 write near2 operation))	164
☐	L6	L5 same ((sav$4 or buffer$4 or stor$4) near3 (write adj request))	9
☐	L5	(power$4 near2 (down or low$7 or stall$4 or idle or halt$4 or stop$4 or off))	311244
☐	L4	L3 same power$4	0
☐	L3	((buffer$4 or stor$4) near2 request) with ((based or depend$4 or respons$4 or accord$4) near2 state)	58
☐	L2	((buffer$4 or stor$4) near2 request) with ((based or depend$4 or respons$4 or accord$4) near5 state)	119
☐	L1	((buffer$4 or stor$4) near2 request) with ((based or depend$4 or respons$4 or accord$4) near5 power$4)	9

END OF SEARCH HISTORY

First Hit Fwd Refs Previous Doc Next Doc Go to Doc#
Generate Collection Print

L6: Entry 2 of 9 File: USPT Oct 8, 2002

DOCUMENT-IDENTIFIER: US 6463509 B1
TITLE: Preloading data in a cache memory according to user-specified preload criteria

Brief Summary Text (6):
In a self-buffered mass storage, the mass storage hardware includes a relatively small buffer memory that is used to hold the contents of recently accessed regions of the mass storage media. When an access request (e.g., a read or write request) is received in the mass storage, control circuitry for the mass storage first determines whether the access hits the contents of the buffer memory. If so, the access occurs in the buffer memory, potentially saving the time required to access the mass storage media itself. Unfortunately, self-buffered mass storage suffers from many of the same disadvantages as OS cache. Specifically, the contents of the buffer memory are usually lost on power down, and the algorithm used to control what data is stored in the data buffer typically does not support user-preferences. Another disadvantage of self-buffered mass storage is that, because the buffer memory is used only for accesses to the associated mass storage, data from other I/O sources are not buffered. For example, the buffer memory of a self-buffered mass storage device typically cannot be used to buffer data from other non-buffered mass storage devices in the computer system or data from mass storage devices outside the computer system such as network servers.

Previous Doc Next Doc Go to Doc#

First Hit Previous Doc Next Doc Go to Doc#
Generate Collection Print

L1: Entry 6 of 9 File: JPAB Aug 21, 1990

DOCUMENT-IDENTIFIER: JP 02210555 A
TITLE: COMPUTER SYSTEM

Abstract Text (2):
CONSTITUTION: A loop monitor means 11 uses a timer function to request reset of a counter 13 of a WDT control means 12 at intervals of a certain time, and the WDT control means 12 resets the counter 13; and when the counted value of the counter 13 exceeds a certain value, the means 12 detects looping of a system program. A system stop means 14 is operated in the highest execution priority level in the system program, and this means 14 saves all contents of the main storage area and requests power-off in response to the detection report from the WDT control means 12. A system stop monitor means 17 requests power-off when a maximum time required for saving of all contents of the main storage area elapses. Thus, the power source is automatically turned off though the system stop means 14 falls to a loop.

Previous Doc Next Doc Go to Doc#

L6: Entry 3 of 9 File: USPT Jun 25, 2002

DOCUMENT-IDENTIFIER: US 6412045 B1
TITLE: Method for transferring data from a host computer to a storage media using selectable caching strategies

Detailed Description Text (34):
If the cache flush modifier parameter is set to zero (0), then immediate cache flushing is indicated. Thus, the controller 18 will write the unwritten write request data to the disk array 26 as soon as possible if not immediately. This may provide the best response time since the amount of dirty data stored in the cache memory 33 will be kept at a minimum, thereby allowing cache memory 33 to be allocated quickly for new write request data. However, since dirty data will be retained in the cache memory 33 for a shorter period of time, fewer cache write hits (overwriting existing write request data stored in memory) will occur, and there will be less opportunity for concatenation and grouping of I/O requests thus causing more I/O accesses to the disk array 26 which degrades the performance of certain RAID levels. At a system shutdown and subsequent power down, all dirty data is quickly written to storage media, and battery 35 can be turned off thereby extending the battery life.

Detailed Description Text (35):
If the cache flush modifier parameter is set to fifteen (15), then the controller 18 will write the dirty or unwritten write request data to storage media only when there is a cache demand for new write request data. This may provide the lowest response time since dirty data stored in the cache memory 33 will be kept at a maximum, thereby causing new write requests to wait until other write request data has been written to storage media. Since dirty data will be retained in the cache memory 33 for a longer period of time, more cache write hits (overwrites) will occur and there will be more opportunities for concatenation and grouping of I/O requests thus causing fewer I/O accesses to storage media which improves the performance of certain RAID levels. At system shutdown and subsequent power down, the dirty write request data remains in cache, thus the battery 35 must be used to preserve the data thereby reducing battery life.

First Hit Previous Doc Next Doc Go to Doc#
Generate Collection Print

L6: Entry 7 of 9 File: JPAB Jan 17, 1997

PUB-NO: JP409016338A
DOCUMENT-IDENTIFIER: JP 09016338 A
TITLE: MAGNETIC DISK DEVICE

PUBN-DATE: January 17, 1997

INVENTOR-INFORMATION:
NAME COUNTRY
OGAWA, YOSHIAKI

ASSIGNEE-INFORMATION:
NAME COUNTRY
NEC ENG LTD

APPL-NO: JP07161718
APPL-DATE: June 28, 1995

INT-CL (IPC): G06 F 3/06; G06 F 3/06; G06 F 12/08; G06 F 12/16

ABSTRACT:

PURPOSE: To provide a magnetic disk device with which write data at the time of write cache processing can be guaranteed.

CONSTITUTION: This device is provided with a write cache processing means receiving all data for a data write request from a host system in a buffer, releasing an interface bus with the host system later and performing write processing to a recording medium after the release of interface, battery 17 for guaranteeing write data from power supply stop at the time of data write after the release of interface bus, and charged capacitance detection circuit 18 for detecting the charged capacitance of this battery. After all the written data from the host system are received, it is judged whether the remaining write processing can be completed by the capacitance detected by the charged capacitance detection circuit 18 or not, and the release timing of interface bus is delayed until the processing can be completed.

Previous Doc Next Doc Go to Doc#

L8: Entry 1 of 40 File: USPT Mar 30, 2004

DOCUMENT-IDENTIFIER: US 6715054 B2
TITLE: Dynamic reallocation of physical storage

Detailed Description Text (23):
Each of the disk units 16 are also defined in terms of their activity by a physical disk table 70 illustrated in FIG. 4. There will be one physical disk table 70 for each one of the physical disk units 16. As FIG. 4 illustrates, the physical disk table 70 includes three entries 72, 74, 76, and 78. Entry 72 identifies the number of requests then pending and/or then being processed by the particular disk unit 16. Entry 74 contains a "cumulative active time" value that is indicative of the actual non-idle time spent by the physical disk unit 16 servicing requests, i.e., writing or reading data. The entry 76 is a value indicative of the time the disk unit 16 switched from an inactive (idle) state to an active (non-idle) state to perform a disk read or write operation in response to a read or write request. Timer 21 is used to develop the cumulative active time value and for the start active time value. The entry 78 (the total number of read/write requests) is value indicative of the total number of read/write requests issued to the physical disk unit 16 since certain time.

First Hit Fwd Refs Previous Doc Next Doc Go to Doc#

Generate Collection Print

L8: Entry 5 of 40 File: USPT Jul 9, 2002

DOCUMENT-IDENTIFIER: US 6418067 B1
TITLE: Semiconductor memory device suitable for merging with logic

Brief Summary Text (71):
Write drivers are divided into blocks corresponding to the respective write mask circuits, and a write mask circuit inhibits the connection between a sense amplifier circuit and an internal data line. As a result, when a write driver block is in the inactive state, the corresponding write mask circuit is activated and inhibits a data write operation so that the data held by a sense amplifier circuit is kept from being changed, and an accurate data write operation can be performed even when the input data bit width is changed.

Previous Doc Next Doc Go to Doc#